



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

LANE MEDICAL LIBRARY STANFORD



2 45 0418 4647



LIFE DEPARTMENT.

Instructions to  
Medical Examiners.

L76  
P11  
1893



INSTRUCTIONS

TO THE

MEDICAL EXAMINERS

OF THE

PACIFIC MUTUAL

Life Insurance Company,

OF CALIFORNIA.

1893.

475  
LAWYER'S LIBRARY

## CONTENTS.

---

1. GENERAL REMARKS TO MEDICAL EXAMINERS.
2. ATTITUDE OF MEDICAL EXAMINERS TO APPLICANTS FOR INSURANCE.
3. MODE OF EXAMINATION.
4. ANALYSIS OF URINE.
5. EXAMINATION OF CHEST.
6. EXAMINATION OF HEART.
7. GENERAL OBSERVATIONS.
8. FAMILY HISTORY.
9. PERSONAL HISTORY.
10. FEMALE LIVES.
11. INTERDICTED OCCUPATIONS.
12. RISKS ACCEPTED WITH SPECIAL CAUTION.
13. GENERAL SUMMARY.
14. DATING OF REPORT.

VRAGELJ MAJ

## INDEX.

	Page.
Age of Applicant, apparent.....	12
Agents, relations to.....	8
Albumin, test for .....	10
Alcohol, effects of on empty stomach .....	16
Alcoholic Indulgence, relations to disease.....	16
Alcoholic Liquors, habits in use of .....	16
"    "    manufacturers of.....	19
Amputations .....	15
Anstie's allowance of alcohol.....	16
Answers to interrogatories, must be specific .....	12
Appetite, effects of alcohol on .....	16
Applicant, concealment of facts by.....	9
"    identification of.....	9
"    relations to.....	8
Appointments, validity of .....	9
Arcus Senilis, significance of .....	12
Asthma .....	14
Attitude to applicants.....	9
Bakers, journeymen.....	19
Balloonists .....	19
Bar-tenders.....	18
Batteries, workers on steam.....	19
Billiard-room keepers.....	19
Blast-furnace employees .....	19
Blood, spitting of .....	14
Blowers, glass .....	19
Calculus.....	15
Cancer.....	13
Car-coupler.....	19
Catarrh.....	15
Chest, diminished respiratory murmur .....	11
"    expansion of.....	11
"    thoroughness in examining.....	11

79949

## INDEX.

	Page.
Chloral .....	16
Chloroform .....	16
Chorea .....	12
Circular Saws, operatives of .....	19
Clothing, removal of .....	11
Cocaine .....	16
Coffee .....	14
Colic .....	16
Company, relations to .....	8
Complications in female risks which postpone .....	18
Condition, present .....	19
Convulsions .....	16
Cranial bones, depression of .....	15
Cystitis, chronic .....	15
Deliveries, by instruments .....	18
Deviation, of height and weight .....	17
Disorders, intestinal .....	16
Divers, submarine .....	19
Ears, ringing in .....	16
Electric dynamo .....	19
Environment, business .....	19
"    social .....	19
Emaciation, significance of, in female risks .....	18
Erasures and interlineations .....	19
Examinations, privacy in .....	10
"    skill and tact in .....	7
Examiners, appointment of .....	7
"    qualifications of .....	7
Exhaustion, in female risks .....	18
Expectation, table of .....	20
Expiration, prolonged .....	11
Explosives, manufacturers of .....	19
Family History .....	12
"    "    that debars .....	13
Fever, typhoid .....	13
Gamblers .....	18
Gonorrhœa .....	14
Grain Elevators, workmen in .....	19
Gymnastics .....	14

## INDEX.

5

	Page.
Headache, persistent .....	16
Health, change of residence for .....	12
Health of localities .....	7
Hearing .....	12
Heart, force of .....	12
"    frequence of .....	12
"    quality of sounds of .....	12
"    rhythm of .....	12
Height and Weight—Table .....	17
Hemorrhage, post-partum .....	18
Hernia .....	15
Hotel Keepers .....	18
Infectious Diseases .....	13
Insurance of women .....	18
Intemperance, relation to insanity .....	13
La Grippe .....	13
Locomotive and Train men .....	19
Malaria .....	17
Malpresentations .....	18
Marble and Stone cutters .....	19
Measles .....	13
Menstruation, prolonged .....	18
Micturition, frequence of .....	13
Miners, underground .....	19
Miscarriages .....	18
Opium .....	16
Phthisis, evidences of incipient .....	12
Printers .....	19
Proportions, table of .....	17
Prostate, enlargement of .....	15
Pulse, rate and quality of .....	15
Report, how and when to date .....	19
"    how written .....	19
"    requirements before making .....	19
Rheumatism .....	14
"    a sequel to heart trouble .....	12
"    age in connection with .....	12
Risks, kind approved .....	19
Rolling mill employees .....	19

	Page.
Saloon Keepers .....	18
Scarlatina .....	13
Seamen, ordinary..	19
Sight .....	12
Skin, condition of..	16
Small Pox.....	15
Speech.....	12
Stricture of urethra.....	14
Sugar, test for.....	10
Syphilis .....	14
Urine, analysis of.....	10
" daily quantity voided.....	11
" decomposition of.....	10
" evidences of sugar in.....	10
" high specific gravity of.....	10
" necessity that reagents be fresh.....	10
Vaccination .....	15
Vague expressions in family history .....	12
Walk.....	12
Whooping Cough .....	13

Instructions to the Medical Examiners  
OF THE  
Pacific Mutual Life Insurance Company  
OF CALIFORNIA.

---

The Medical Director of the Pacific Mutual Life Insurance Company, of California, presents the following Instructions and suggestions to its Medical Examiners.

It is understood that the medical examiner is selected in any locality, as possessing several important qualifications, not only professional but personal. While it is indispensable that he must be proficient in the several branches of a medical education, it is not less important that he should be loyal to the true interests of the Company and possessed of such tact as to be able to discharge his duties without (unnecessary) offense or embarrassment to agents and applicants for insurance, whose desires may at times conflict with the Company's policy. The examiner holds his appointment from the Company, and is expected to feel that he is responsible to the Home Office. It is moreover desired that he shall not consider his duties ended with signing reports to applications for insurance. In ways more than can be specified he may serve the Company and conduce to its prosperity and the advantage of its policy-holders. For instance, he can make special reports on the public health of localities, upon certain industries as affecting the health of the population, upon avoidable causes of disease, and upon habits, conduct or em-

Appointments  
made by Home  
Office.

General San-  
itary duties of  
Medical Examin-  
ers.

ployment of policy-holders derogatory to health. Such reports will always be gratefully received and regarded as confidential. While he is not expected to canvass for insurance, he is expected, as opportunity offers, to further the Company's interests and promote its business. If in any case he should be wholly or partially instrumental in securing an application for insurance, it is expected that he will not act as medical examiner in the case. The same rule is to be observed as regards the examination of a near relative, or one in close business relations. For like reason the medical examiner must not stand in such relation with a solicitor of the Company. In order that the examiner may be without bias, his fee remains the same, whether the candidate be rejected or accepted; but he is expected to decline examination of any proposed candidate whom he knows to be disqualified by reason of physical unsoundness, bad habits, or objectionable occupation. Dealings with such subjects are discreditable alike to solicitors and medical examiners. It is hoped that all who are connected with the Company will ever keep its good name and business success above all personal interests, and it must not be forgotten that their own permanent interest is subserved by guarding that of the Company and its policy-holders.

**Medical fee.**

The fixed fee for each examination for new insurance includes any charge for the testing of the urine, except that by microscope.

**Fee for microscopic examination.**

Whenever a microscopic examination of the urine is necessary, the additional fee will be the same as that allowed for the physical examination of the applicant.

**Reexamination fee not chargeable to Company.**

When the examination is in connection with an application for restoration of a lapsed policy, the

**Relations of  
Examiner to Ap-  
plicant.**

s to be paid by the applicant and is not to be charged to the Company.

No extra fees for mileage or detention are allowed by the Company. Any claim for such must be a personal matter of agreement with the agent.

An examiner's commission is valid only for his place of residence at the time of appointment.

Extra fees for mileage not allowable.

Appointments invalidated for removal.

### Attitude to Applicants for Policies.

It is to be observed that he who applies for a pension seeks it on the ground of physical infirmity and is inclined to magnify the same; while he who applies for life insurance seeks to present the evidences of sound health. The examiner therefore finds himself sometimes in the position of a lawyer in the cross-examination of an unwilling witness. The lawyer often seeks to confuse and offend the witness, but the medical examiner must always be courteous, and obtain by tact what the candidate desires to conceal. If satisfied that the latter is attempting to deceive him, he should privately notify the Home Office in time to avert danger. This mode of communication is always available at the option of medical examiners, on all points which they do not wish to embody fully in the open report that passes through the agent's hands; or this report may in certain cases be sent directly to the Home Office. In any case the candidate may understand that the Home Office holds both the right and the responsibility of rejection.

Attitude to applicants.

### Mode of Examination.

If the candidate be previously a stranger to the examiner, he must be so introduced that there can be no chance of mistake in identity or room for impersonation by another.

**Examination  
must be made in  
private.**

The examination must be in private; preferably in the doctor's office, or in some room specially provided.

**Test for albu-  
min.**

As the urine is tested in all instances for albumin and sugar, the most approved reagents must be ready for use, together with urinometer, test tubes, test papers, etc. For albumin, examination by heat and nitric acid is adequate. After filtration, if necessary, the urine should be boiled, preferably near the top of the column. Any precipitate thus resulting, which is dissolved by the addition of nitric acid, is not albumin. The nitric acid test may be applied by allowing a few drops to flow down the side of the test tube and watching the point of contact with the urine, or by pouring gradually the urine on a small quantity of acid in the tube, and afterwards boiling.

**Reagents and  
method of testing  
for sugar.**

For sugar, the method of Prof. Austin Flint, Jr., is recommended. Make a solution of 95 grains of sulphate of copper in an ounce of distilled water; another of 379 grains of neutral tartrate of potassium to the fluid ounce of distilled water, and a third solution of caustic soda in distilled water, such as to be of a specific gravity of 1.12 or 16½ Beaume. Keep these in separate bottles, and mix for use as follows:  $\frac{1}{2}$  fluid-drachm each of the copper sulphate and potassium tartrate solutions with two fluid-drachms of the caustic soda solution. This mixture will be good for a few days, if well stopped from the air, but must be renewed from time to time. If the first two, in mixing, produce a precipitate, this is cleared up by the addition of the third and shaking. About one inch of the mixture in a clean test tube is boiled, and while still hot the urine is dropped slowly therein. Sugar

is indicated by rapid production of an orange yellow or reddish precipitate; and if none is produced by adding an equal volume of urine and waiting for the whole to cool, no sugar is present. In case either albumin or sugar be found, the examiner should state in the report whether the precipitate be abundant, scanty or a mere trace. A trace of either would justify postponement and subsequent examination; but this fact should be reported to the Home Office. The other points of examination of urine should be carefully noted according to the blank, and require no particular instruction. The urine examined should be passed in the presence of the examiner, and he should ascertain approximately the quantity secreted daily, and whether the candidate usually rises in the night to empty the bladder. The latter fact should lead to further examination for stricture of the urethra, or of enlarged prostate in a subject more than 40 years old; while abnormally high specific gravity renders specially important the test for sugar.

#### Examination of Chest,

The examination of the chest should be thorough, and this requires removal of all covering except the undershirt. Expansion of the chest should be alike on both sides, and should be more than two inches on forced inspiration. Be careful to observe any prolonged expiration, or diminished respiratory murmur in any tract of the lungs, particularly the summit of either lung; and any variation in sound between the two, whether in auscultation or percussion. It should be remembered that an advanced case of pulmonary phthisis rarely comes under the examiner's notice, and he may be the first one to detect its incipiency.

Examination of  
chest.

**Examination of Heart.****Examination of heart.**

The force, rhythm, frequency and quality of the heart sounds must always be carefully observed, and particular care be exercised when there is a history of rheumatism. Unusual care in examination of the lungs before the age of 30, and of the heart after 40 or 45 should be exercised.

**General Observations.****Age determined from general appearance.**

The medical examiner should observe whether the candidate has the appearance of being older than the age given; whether there be any defect of the organs of sight or hearing, together with its kind and degree; presence of arcus senilis; any abnormality of speech or walk; any muscular trembling or jerking (chorea).

The answers to the printed list of questions must be full and precise, without possible ambiguity of expression.

**Family History.****Family history.**

In the matter of Family History, ascertain if possible the specific cause of death. Such answers as "exposure," "general debility," apart from extreme old age, "child birth," "change of life," "effects of cold," "liver complaint," "fever," "heart failure," and other like vague and unmeaning expressions should be avoided. By further questioning it is generally practicable to obtain answers which lead to at least probable conclusion. Especially "exposure," and "effects of cold," should lead to suspicion of pulmonary consumption; chronic dyspepsia to cancer of stomach, vaginal womb complaint to cancer of that organ.

**Absence because of ill health.**

If the applicant has been away for his health or is at present place of residence for its benefit, satisfy yourself as to the condition that demanded it and state the facts fully.

It is also important to learn whether alcoholic intemperance and insanity are family traits, and on these points the examiner must not expect to find a willing witness. The direct question whether a near relative was ever an inmate of an asylum for the insane ought to elicit a categorical reply. The death of a relative from kidney or liver disease leads to inquiry about his indulgence in alcohol. General ignorance of the causes of death of near relatives and of their ages at the time of death is ground for suspicion of concealment, and the candidate might be gently warned that the Home Office would put an injurious construction upon it.

Intemperance and insanity.

The following family histories generally debar from life insurance or limit to term policies. Consumption in both parents; in one parent, if applicant be under 30 years of age; in more than two brothers or sisters; death from disease of the heart or kidneys in more than one member of the family; insanity, paralysis or cancer in more than one member.

Traits in family history which debar.

### Personal History.

The candidate may affirm at the outset that he has never been sick, but it is probable that he will be found to have had the usual diseases incident to childhood. Question upon the nature of such attacks. It should be remembered that "the infectious diseases often produce tardy consequences," and that the lesions following influenza (la grippe), typhoid fever, small pox, scarlatina, etc., may remain latent for months or even years. A severe or prolonged siege of whooping-cough may leave an indelible stamp upon the lungs, in the shape of emphysema or localized atelectasis; measles may have been complicated with pneumonia,

Effect of disease on personal history.

resulting in permanent damage to the lungs; scarlet fever may have left a grave sequela like chronic otorrhea or deafness. When, therefore, an applicant for insurance acknowledges having had either of those afflictions great care should be exercised in the examination of the candidate, especially with reference to the heart and lungs. Aside from such diseases, very few can affirm that they have never taken medicine nor had a doctor's attendance.

Specific answers must be given to the whole list of printed questions.

**Rheumatism.**

Previous existence of rheumatism necessitates inquiry into the number, duration and severity of attacks, how recent the last attack, and whether any cardiac complication ensued.

**Syphilis.**

Admission of syphilis leads to question of consecutive symptoms, length of time under systematic treatment, whether relapse occurred, and interval since final disappearance of the disease. Confession of gonorrhea calls for inquiry relative to stricture, gleet, and so-called gonorrhreal rheumatism.

**Gonorrhea.**

Spitting of blood must be presumed to have a pulmonary origin, unless the contrary can be clearly proved. Ascertain whether this has been frequent, rare or solitary; also the amount of blood lost, and interval since last occurrence.

**Asthma.**

With a history of asthma, its frequency, severity and interval since last attack must be noted. Special search must then be made for emphysema of the lungs and any heart complication.

**Effects of Tobacco, tea and coffee.**

It is to be observed that palpitation of the heart, without organic mischief may be due to indulgence in tobacco, coffee or tea, and postponement, with abstinence may remove the bar to admission.

**Gymnastics.**

Here it may be proper to note the proneness of those who engage in severe gymnastic exercises or

athletic training to sudden cardiac break down, so that inquiry into such habits is advisable.

The pulse should be observed for force, rate and rhythm, at an early stage of the examination, and again later, if any deviation from the normal condition be observed. Quality of pulse.

Hernia, hemorrhoids, fistula in ano, otorrhea, and any chronic trouble with the hips or knee joints, require particular inquiry and precise answers, the last three with reference to the scrofulous or tuberculous taint. Hernia.

In case of amputation, state point of operation, whether in consequence of disease or injury, condition of stump, and whether an artificial limb is worn or can be. Amputations.

Be particular to search for evidence of successful vaccination. Lack of same imposes a special clause in the policy contract reading as follows: "It is provided and agreed that the within named ..... is not insured by this policy against death by small-pox or varioloid or in consequence of having had either, unless a certificate from one of the approved Medical Examiners of the Company, satisfactory to the Company, shall be furnished at its Home Office, that the person whose life is hereby insured had been previously successfully vaccinated, in which case the Company will assume the risk of death by small-pox or varioloid." Vaccination and small-pox.

If irritability of the bladder be acknowledged (too frequent urination), look for calculus, chronic cystitis, or enlargement of prostate gland, and give full particulars if either be found. Irritability of bladder.

In case of catarrh, state severity, duration and frequency of attacks. Catarrh.

Depression of cranial bones must be fully described and any consequence thereof noted. Depression of cranial bones.

## Intestinal disorders.

Intestinal disorders, passed or present, must be described as to nature, cause, duration and frequency.

## Headaches, etc.

Relative to headache, ringing in the ears, and numbness or tingling in the limbs, state severity and frequency, and if possible the cause.

## Condition of skin.

In discoloration of the skin, be satisfied whether it may result from fault of the liver or of the suprarenal capsules, and report accordingly.

## Colic.

In case of colic, be careful to distinguish between common intestinal colic and that due to passage of gall stones. If it be the latter variety, ascertain frequency and date of last attack.

## Convulsions.

Inquiry about fits has special reference to epilepsy, though popular use of the term has wider significance.

## Habits in the use of alcoholic drinks.

As to habits in the use of alcoholic drinks, the examiner must be exceedingly careful and thorough. The past as well as present history must be covered, for a man may have sobered up for a year with special reference to life insurance, and is quite likely to relapse. Anstie's maximum allowance of  $1\frac{1}{2}$  fluid ounces of absolute alcohol or its equivalent in spirits, wine or malt liquor, is good as far as it goes; but it must be observed that undiluted spirits on an empty stomach in one or two portions is very different in effect from the same amount of alcohol largely diluted, taken with food or soon after. Ascertain whether the individual takes spirits or bitters to give him an appetite, and report accordingly.

## Use of narcotics.

It is also necessary to inquire into the use of such drugs as opium, chloral, chloroform and cocaine. If taken habitually, ascertain amount and frequency.

Repeated attacks of malarial fever call for special care in regard to integrity of the liver, kidneys and spleen. Where organic deviation of any organ from its normal condition has ensued, the candidate cannot be accepted without full restoration, and probably not while a resident of the locality where the disorder was contracted.

Effects of malaria.

Excessively tall or heavy persons, or those who are unduly light are undesirable risks. If there be any considerable deviation from the "standard weight" in the following table, state whether there has been any recent or rapid loss or gain.

Symmetry of all parts necessary.

HEIGHT.	STANDARD WEIGHT.	20% UNDER WEIGHT.	20% OVER WEIGHT.	CHEST.
5 ft., 1 in.	120 lbs.	96 lbs.	144 lbs.	34 in.
5 " 2 "	125 "	100 "	150 "	35 "
5 " 3 "	130 "	104 "	156 "	36 "
5 " 4 "	135 "	108 "	162 "	36½ "
5 " 5 "	140 "	112 "	168 "	37 "
5 " 6 "	143 "	114 "	172 "	37½ "
5 " 7 "	145 "	116 "	174 "	38 "
5 " 8 "	148 "	118 "	178 "	38½ "
5 " 9 "	155 "	124 "	186 "	39 "
5 " 10 "	160 "	128 "	192 "	39½ "
5 " 11 "	165 "	132 "	198 "	40½ "
6 " 00 "	170 "	136 "	204 "	41 "

With other conditions favorable, a deviation of 20 per cent. above or below the "standard weight" is allowable (see table). It should be stated always whether such deviation be a family trait.

**Female Lives.****Female lives.**

The physical examination should be made with the greatest care, nothing being taken for granted.

A woman is not insurable when pregnant for the first time.

The liability to cancer of the uterus and breasts should always be duly considered, especially during the climacteric.

Prolonged menstruation at this period should always create suspicion, and induce the postponement of insurance until after the cessation of the menstrual function.

A history of repeated miscarriages, malpresentations, instrumental deliveries, post-partum hemorrhages and puerperal convulsions debars from insurance during the child-bearing period.

Primiparae being more liable to the complications of difficult labor than those who have borne children, an applicant who is pregnant for the first time must be postponed until she has fully recovered from the effects of parturition.

A history of emaciation and exhaustion being a predisposing cause for the development of constitutional diseases, usually postpones unless the applicant be in exceptionally good health, possesses a good family history and otherwise enjoys perfect general health.

**Interdicted Occupations.****Occupations which debar.**

Individuals engaged in the following occupations are not ordinarily accepted for life insurance, and no fees will be allowed for examination of such, unless first specially authorized by the Home Office. Gamblers, bar-tenders, hotel proprietors who attend to their own bars, keepers of saloons

where liquors are sold, keepers of billiard or pool rooms, all those personally engaged in the manufacture of alcoholic drinks; also miners and others working under ground, men employed on locomotives and trains (except passenger conductors), and in coupling and switching cars; those employed about blast furnaces and rolling mills, and in the manufacture of all kinds of explosives and fireworks, ordinary seamen, divers and other submarine workers, balloonists, operatives in steam mills or on circular saws, glass blowers and men employed about electric dynamos and wires.

### Risks Accepted with Special Caution.

The following are accepted with special caution or reserve: marble or stone cutters, journeymen-bakers, printers, workmen on steam presses and in grain elevators, and battersies.

In the general summing up, it must be observed that the Company accepts only such risks as are approved in respect to present physical condition, family history, and social and business environment.

### Dating of Report.

Finally, the report must be dated on the very day on which the examination was made and concluded; it must be written with one kind of ink; if erasures or interliniations be necessary, they must be verified by the signature or initials of the examiner attached; and the examiner must see that the agent has previously filled out his part of the work, before beginning his examination.

Occupations requiring great care in accepting.

General summary upon which risks are approved.

Requirements as to date and manner of signing reports

W. R. CLUNESS, M. D.

*San Francisco, April, 1893.*

The following table is inserted for the convenience and information of the Medical Examiner:

**Table of Expectation of Life.**

AGE.	EXP.	AGE.	EXP.	AGE.	EXP.	AGE.	EXP.
10	48.7	33	33.2	56	16.7	79	4.8
11	48.1	34	32.5	57	16.1	80	4.4
12	47.4	35	31.8	58	15.4	81	4.1
13	46.8	36	31.1	59	14.7	82	3.7
14	46.2	37	30.4	60	14.1	83	3.4
15	45.5	38	29.6	61	13.5	84	3.1
16	44.9	39	28.9	62	12.9	85	2.8
17	44.2	40	28.2	63	12.3	86	2.5
18	43.5	41	27.5	64	11.7	87	2.2
19	42.9	42	26.7	65	11.1	88	1.9
20	42.2	43	26.0	66	10.5	89	1.7
21	41.5	44	25.3	67	10.0	90	1.4
22	40.9	45	24.5	68	9.5	91	1.2
23	40.2	46	23.8	69	9.0	92	1.0
24	39.5	47	23.1	70	8.5	93	.8
25	38.8	48	22.4	71	8.0	94	.6
26	38.1	49	21.6	72	7.6	95	.5
27	37.4	50	20.9	73	7.1		
28	36.7	51	20.2	74	6.7		
29	36.0	52	19.5	75	6.3		
30	35.3	53	18.8	76	5.9		
31	34.6	54	18.1	77	5.5		
32	33.9	55	17.4	78	5.1		

Long and careful observations have shown that though the life of any given individual is proverbially uncertain, yet that, if a large number of persons in ordinary circumstances at a given age be taken, there is a law, fixed and uniform, determining within very narrow limits the average number of years of life remaining to them. For example, if we take 10,000 persons at the age of 29 years, the sum of their ages at death will amount to about 650,000 years, showing that, on an average, each person now 29 years old will live very nearly 36 years longer. This mean after-lifetime is called the *expectation* of life at the insured age, that is, the number of years which one at that age may *expect probably* to live, though many will die sooner, and even 72 out of the 10,000 during the first year.



LANE MEDICAL LIBRARY

This book should be returned on or before  
the date last stamped below.

--	--	--

79949

576 Pacific mutual life ins  
511 co. Instructions to  
1893 the medical examiners

